

Exhibit 42

Architecture for Agent-Mediated Personalised News Services

Marko Turpeinen, Janne Saarela,
Mari Korkeä-aho, Tuomas Puskala, Reijo Sulonen

Department of Computer Science
Helsinki University of Technology

Corresponding author:

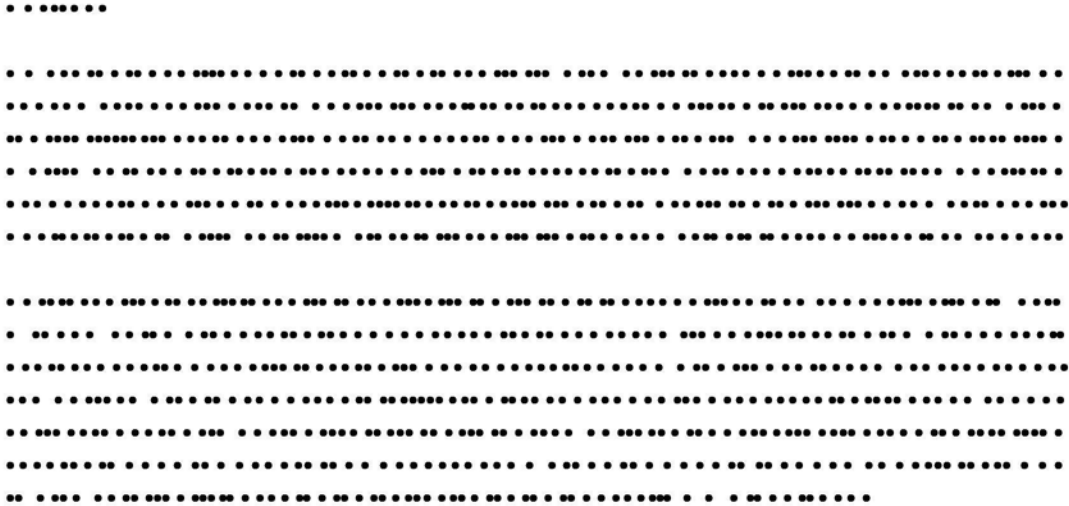
Marko Turpeinen
Helsinki University of Technology/ Room Y309b
Otakaari 1
02150 Espoo
Finland

email: mtu@cs.hut.fi
phone: +358-50-64084
fax: +358-0-4513293

Architecture for Agent-Mediated Personalised News Services

Marko Turpeinen, Janne Saarela,
Mari Korkea-aho, Tuomas Puskala, Reijo Sulonen¹

Department of Computer Science
Helsinki University of Technology



1 Introduction

Personalised news service is an ideal and challenging task for autonomous agents. Users are looking for personal assistants that are constantly monitoring the network for interesting information and services. On the other hand, the service providers try to differentiate among thousands of other information production sites (figure 1). How can the producers target their message to the right consumers?

Agents can be considered as [Wiederhold92] that refine and forward information from heterogeneous data sources to the users. Multi-agent intercommunication methods enable message passing between agents in a network environment. The transmits user requests for potential and filters messages according to user preferences. The producer agent acts as an that has a domain model of its own expertise [Fikes95]. The producer agent can advertise the services to the consumer agents in the network. Agents negotiate how, when, and which information items should be transmitted. Agents are also able to consult other agents for suggestions and further information. Finally the agents assist in completing necessary data transfer tasks and financial transactions.

The producer agent presents some descriptors of the multimedia information items to the consumer agent, that acts as an information filter. The consumer agent forwards to the user a subset of items selected based on user profile. Users have the option of providing the consumer agent with feedback either explicitly (i.e. rating mechanism in the user interface) or implicitly (i.e. skipping over the uninteresting items).

¹ Email: { mtu, jsaarela, mka, tpu, shs } @cs.hut.fi